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PATENT APPLICATIONS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	Group Art Unit: 2307
KLUG	Examiner: P. Wang
Serial No.: 07/975,905	Appeal No.:
Filed: November 12, 1992	APPELLANT'S BRIEF ON APPEAL (37 C.F.R. § 1.192)
Atty. File No.: 2355-1-1	ATTN: Board of Patent Appeals and Interferences
For: "REMOTE MULTIPLE-USER EDITING SYSTEM AND METHOD"	

95-4544

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

3/29/95

Dear Sir:

Appellant submits this Brief in furtherance of the Notice of Appeal filed on November 7, 1994 with regard to the above-identified patent application. Enclosed herewith is a petition for a two-month extension of time, thereby extending the time period for response from January 7, 1995 to March 7, 1995, as well as a check in the amount of $185.00 as the fee for such extension. Please credit any overpayment or charge any underpayment associated with this Brief to Deposit Account No. 19-1970.

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CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO COMMISSIONER OF PATENTS AND TRADEMARKS, WASHINGTON, DC 20231 ON March 7, 1995.

SHERIDAN ROSS & McINTOSH

BY: Janice Messer

The fee required under 37 C.F.R. § 1.17(f) for this Brief is dealt with in the accompanying "Transmittal of Appeal Brief." Moreover, this Brief is being transmitted in triplicate pursuant to 37 C.F.R. § 1.192(a). Furthermore, the structure of the Brief is as follows and in the order required by 37 C.F.R. § 1.192(c):

I. Status of Claims

II. Status of Amendments

III. Summary of Invention

IV. Issues

V. Grouping of Claims

VI. Non-Obviousness Standard for Patentability

VII. Discussion of § 103 Rejection References

VIII. Arguments: Rejections under 35 U.S.C. § 103

IX. Conclusion

Appendices

A. Claims involved in the appeal;

B. A copy of U.S. Patent Nos. 5,008,853 to Bly et al. ("Bly") and 5,173,854 to Kaufman et al. ("Kaufman"); and

C. Copies of cases cited in this Brief.

I. STATUS OF CLAIMS (37 C.F.R. § 1.192(c)(1))

The status of the claims is as follows:

1. Claims cancelled: 12, 16, 18-22, and 24;

2. Claims withdrawn from consideration but not cancelled: None;

3. Claims pending: 1-11, 13-15, 17, 23, and 25-28;

4. Claims allowed: None;

5. Claims rejected: 1-11, 13-15, 17, 23, and 25-28; and

6. Claims appealed: 1-11, 13-15, 17, 23, and 25-28 as set forth in Appendix A.

II. STATUS OF AMENDMENTS (37 C.F.R. § 1.192(c)(2))

Appellant filed an "Amendment After Final Rejection Under 37 C.F.R. § 1.116" on November 7, 1994 in which: 1) Claims 18-22 were cancelled; 2) Claims 1, 2, 9, 10, 11, and 23 were amended; and 3) Claims 27-28 were added. In an Advisory Action dated November 25, 1994 the Examiner indicated that this Amendment would be entered upon the filing of a Notice of Appeal. Appellant filed its Notice of Appeal on November 7, 1994. Consequently, the noted Amendment has been entered and thus the amendments made therein are reflected by the claims in Appendix A.

III. SUMMARY OF INVENTION (37 C.F.R. § 1.192(c)(3))

Independent Claims 1, 9, and 23 and dependent Claim 11 are each separately addressed below consistent with the grouping of claims as presented in Article V. Summarily, Appellant's claimed invention is generally directed to a collaborative computer file editing system which allows a plurality of remotely located users (i.e., at least one individual at each remote location) involved in the collaborative editing process

to at least see the edits input by at least one of the users to a selected computer file on a substantially real-time basis (i.e., substantially simultaneously with the inputting of the edits). More specifically, Appellant's claimed invention includes a plurality of interconnected personal computers or terminals, each having a display, with at least one of the personal computers being designated as the host for purposes of a given editing operation. In this regard, the host personal computer has multi-tasking processing capabilities for automatically coordinating:

1. the execution of file editing operations on the selected computer file which involve edits of less than the entirety of the selected computer file and which are inputted by at least one of the users at a corresponding personal computer; and
2. the transfer of data corresponding with and limited to only the edits from the host personal computer directly to the displays of all of the personal computers/terminals; and
3. wherein the editing operations and corresponding limited data transfer occur on a substantially real-time basis relative to the edit inputs to permit the plurality of remotely located users to review the edits substantially contemporaneously with the corresponding input thereof and execution of the file editing operations.

A computer file editing system for a plurality of users at different remote locations is presented in independent Claim 1 and is embodied within the embodiments illustrated in Figs. 1 and 4 of the above-identified patent application. All claims will be described in relation to Fig. 1. The Fig. 1 embodiment utilizes a digital communications network 22, whereas the Fig. 4 embodiment utilizes an analog communications network 64 .

Referring to Fig. 1, the computer file editing system of independent Claim 1 generally includes a plurality of remotely located personal computers ("PCs") (e.g., PCs 10, 12, and 14: page 15, lines 4-7). Each PC has an appropriate display (e.g, display 35 of PC 10: page 20, lines 14-16) and the PCs are appropriately interconnected to allow communication therebetween (e.g., digital communications network 22: page 15, lines 8-9; page 20, lines 1-5). A user (e.g., one or more individuals) is associated with each PC such that a plurality of users may participate in the editing of a predetermined computer file (e.g., page 16, lines 7-9).

For a given editing operation, at least one of the PCs is designated as the host computer for file editing operations (e.g., PC 10: page 16, lines 9-14). This host PC has multi-tasking processing capabilities (e.g., PC 10: page 16, lines 14-19) to coordinate both the execution of the editing of only a portion of the predetermined computer file inputted by at least one of the users (i.e., only one user needs to have input capabilities, while all users have visualization capabilities),

and the transfer of data corresponding with the edited portions to the displays of all PCs (e.g,. PCs 10, 12, and 14: page 10, lines 22-28; page 11, line 26 through page 12, line 10; page 18, lines 9-17; page 20, line 18 through page 21, line 3; page 22, lines 5-6; page 23, lines 6-12). As such, the plurality of users concurrently view the predetermined computer file with the edits being provided to each of the users through the display of their associated PC on a substantially real-time basis and thus substantially contemporaneously with the inputting of the edits by at least one of the users (e.g., page 9, line 22 through page 10, line 12; page 18, lines 18-21; page 23, line 26 through page 24, line 2). That is, by reviewing their respective displays, each user is able to see the edits being entered by a given user substantially contemporaneously with the inputting of these edits. As such, this provides the users of the system of Claim 1 with the ability for utilizing multi-communication media to "communicate" with the other users. That is, not only are the users of the invention of Claim 1 in communication with all other users by being able to see the inputting of the edits to a given computer file in accordance with the above, but the system provides the flexibility for incorporating other communication media such as teleconferencing to augment editing operations.

Bly and/or Kaufman simply do not disclose Claim 1 in that singularly or combinatively they do not disclose or suggest a computer file editing system in which a host personal computer

with multi-tasking processing capabilities both coordinates the execution of editing of a given computer file and the transfer of data, limited only to the edits, to a plurality of remote displays such that each user at a remote display may view the editing of a given computer file on substantially a real-time basis (i.e., such that each of the users sees the edits on the computer file substantially contemporaneously with the inputting thereof by a given user).

Independent Claim 9 includes limitations which are similar to those discussed above with regard to Claim 1. That is, a plurality of remotely located users are able to each view the editing of a given computer file on substantially a real-time basis (i.e., each of the users sees the edits on the computer file substantially contemporaneously with the inputting thereof by a given user). Claim 9 is therefore allowable for the reasons presented above in relation to Claim 1. However, Claim 9 includes additional features which, when combined with those similar to Claim 1, provide an additional basis for allowability over the combination of Bly and Kaufman asserted by the Examiner. In this regard, Claim 9 further requires that each of the plurality of PCs include an inputting device (e.g., keyboards associated with PCs 10, 12, 14, including keyboard 36 for PC 10: page 20, lines 14-16; page 22, lines 3-6), and that each of these inputting devices be interconnected with the multi-tasking processor of the host PC (e.g., keyboard and display of PCs 12, 14 interconnected with host PC 10: page 20,

line 17 through page 21, line 3; page 22, lines 5-6). As such, Claim 9 further requires that each of the users be able to directly input desired edits to the subject computer file. The system of Claim 9 thus not only allows the multiple users which are parties to a given editing operation to see the same edits being made to a given computer file on a real-time basis, but to take responsive actions in the given editing operation by inputting their own respective ideas directly into the subject computer file. This ability for each user to directly input edits allows each user to propose modifications to the computer file which in some circumstances may be difficult to convey when utilizing only other communication media and/or when additional communication media is not available. Bly and/or Kaufman do not disclose this additional "feature" presented by Claim 9.

Independent Claim 23 includes limitations which are similar to those discussed above with regard to Claim 1. That is, in the system of Claim 23 a plurality of remotely located users are able to each view the editing of a given computer file on substantially a real-time basis (i.e., each of the users sees the edits on the computer file substantially contemporaneously with the inputting thereof by a given user). Claim 23 is therefore allowable for the reasons presented above in relation to Claim 1. However, Claim 23 includes additional features which, when combined with features similar to those of Claim 1, provide an additional basis for allowability over the combination of Bly and Kaufman asserted by the Examiner.

Initially it should be noted that Claim 23 only requires that there be a plurality of remote terminals and a PC with multi-tasking capabilities, each of which has an appropriate display (e.g., page 22, lines 3-6). Claim 23 further requires that the users be in voice communication (e.g., via telephone handsets 16, 18, 20: page 15, lines 9-14). As such, the users or participants in the editing operation of a given computer file may discuss the editing of the computer as well as see the edits on a substantially real-time basis. This thereby provides each of the users of the system of Claim 23 with multi-communication media abilities. That is, not only are the users of the invention of Claim 23 in "communication" with each other by being able to see the inputting of the same edits to a given computer file in accordance with the above, but the system also incorporates a voice communication media to augment file editing operations. Bly and/or Kaufman do not disclose this additional "feature" presented by Claim 23.

Claim 11 depends from Claim 9 and is therefore allowable for the above-noted reasons. However, Claim 11 includes an additional feature which, when combined with those of Claim 9, provide an additional basis for allowability over the combination of Bly and Kaufman asserted by the Examiner. Specifically, Claim 11 further requires that the users be in voice communication (e.g., via telephone handsets 16,18,20: page 15, lines 9-14). As noted above with regard to Claim 23, Bly and/or Kaufman do not disclose this additional "feature".

IV. ISSUES (37 C.F.R. § 1.192(c)(4))

Are Claims 1-11, 13-15, 17, 23, and 25-28 obvious in view of Bly and Kaufman?

V. GROUPING OF CLAIMS (37 C.F.R. § 1.192(c)(5))

Claims 1, 3, and 5-8 stand and fall together.

Claims 9, 10, 14, 15, and 17 stand and fall together.

Claims 2, 4, 23, and 25-28 stand and fall together.

Claims 11 and 13 stand and fall together.

VI. NON-OBVIOUSNESS STANDARD FOR PATENTABILITY

The outstanding rejection of all pending claims is under 35 U.S.C. § 103 which provides in relevant part:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

35 U.S.C.A. § 103 (1984). The concept of "prima facie obviousness" has evolved as a procedural tool for purposes of streamlining patent prosecution by defining the burdens between

the patent examiner and the patent applicant to address this "non-obviousness" standard. In re Oetiker, 24 U.S.P.Q.2d (BNA) 1443, 1444 (Fed. Cir. 1992). Under these guidelines, the examiner has the initial burden of establishing that a claimed invention is prima facie obvious based upon one or more references. In re Rijckaert, 28 U.S.P.Q.2d (BNA) 1955, 1956 (Fed. Cir. 1993). "A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." Id. (quoting In re Bell, 26 U.S.P.Q.2d (BNA) 1529, 1531 (Fed. Cir. 1993). Specifically, there must be some reason, suggestion, motivation, or incentive in the prior art references to combine the various teachings in a manner which defines the claimed combination. In re Fine, 5 U.S.P.Q.2d (BNA) 1596, 1599 (Fed. Cir. 1988). In the absence of this reason, suggestion, motivation, or incentive to combine the teachings of the prior art in the manner set forth in the claimed invention, the claimed combination cannot be deemed to be obvious. In re Fritch, 23 U.S.P.Q.2d (BNA) 1780, 1783 (Fed. Cir. 1992).

Once the examiner establishes a prima facie case of obviousness, the burden shifts to the patent applicant to offer a rebuttal. In re Oetiker, 24 U.S.P.Q.2d (BNA) at 1444. This rebuttal may be based upon the presentation of evidence and/or arguments as to why a prima facie case does not exist. Id. Arguments which may be persuasive to rebut an alleged prima

facie case of obviousness include without limitation that: 1) the proposed combination does not in fact disclose or suggest all of the limitations present in a given claim (e.g., all claim elements are not disclosed by the combination asserted by the examiner), In re Rijckaert, 28 U.S.P.Q.2d (BNA) at 1957; 2) there would be no motivation to combine the teachings in the manner suggested by the examiner since the problem confronted by the patent applicant differed from those addressed in the particular prior art teachings, In re Fine, 5 U.S.P.Q.2d (BNA) at 1599; 3) the prior art actually teaches away from the proposed combination of prior art references suggested by the examiner, Id.; Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 227 U.S.P.Q. (BNA) 657, 666-67; and 4) the examiner has used impermissible hindsight by using the patent applicant's specification as a blueprint to reconstruct the claimed invention from the references, In re Fritch, 23 U.S.P.Q.2d (BNA) at 1784. "After evidence or argument is submitted by the applicant in response [to the examiner's proffered prima facie case], patentability is determined on the totality of the record, by a preponderance of evidence with due consideration to persuasiveness of argument." In re Oetiker, 24 U.S.P.Q.2d (BNA) at 1444. That is, all "facts" which are presented are relevant to the obviousness inquiry and must be considered in judging the patentability of the claimed invention. Ashland Oil, 227 U.S.P.Q. (BNA) at 664.

VII. DISCUSSION OF § 103 REJECTION REFERENCES

The Examiner has rejected all pending claims under 35 U.S.C. § 103 based upon the combination of Bly and Kaufman. A brief discussion of the fundamentals disclosed by each of these references follows.

A. Disclosure of Bly

Bly is generally directed to a multi-user computer system. While Bly does indicate that its system allows multiple users to concurrently access a "shared structure data object" and edit the same, Bly does not disclose or suggest that each participant in a given editing operation on a given computer file is able to view the same edits being made to a given computer file on a substantially real-time basis. Stated another way, Bly does not disclose or suggest an editing system wherein each of a plurality of users of the system sees the edits on the computer file substantially contemporaneously with the inputting thereof by a given user.

The "shared structure data object" referred to in Bly actually includes one or more structure data objects in the form of data entries. An example of this "heiarchy" is a book (the shared structure data object) with a plurality of chapters (the structured data objects or data entries). Two fundamental advantages expressed by Bly with regard to its multi-user system are that: 1) it allows only one user to access a given data entry to edit the same (e.g., column 8, lines 50-56; column 12,

lines 47-49; column 16, lines 53-57; column 21, lines 28-31; column 23, line 68 through column 25, line 2); and 2) it provides status information regarding the shared structure data object only when requested such that the status of editing operations are not immediately provided to all users (column 8, lines 38-44; column 22, lines 59-67). More specifically, the multi-user system of Bly prevents two users from even attempting to modify the same information at the same time since only one user may access this information at any one time. Consequently, in contrast to the requirements of Claim 1, Bly does not disclose or suggest a computer file editing system in which a host personal computer with multi-tasking processing capabilities both coordinates the execution of editing of a given computer file and the transfer of data, limited to the edits, to a plurality of remote computer displays such that each user at a remote display may view the editing of a given computer file on substantially a real-time basis (i.e., where each of the users sees the edits on the computer file substantially contemporaneously with the inputting thereof by a given user).

The "hardware" of the Bly multi-user system is illustrated in Fig. 1. The system 10 includes a number of user stations 14 which are appropriately interconnected via a network 12 (e.g., column 15, lines 15-19). In the illustrated example, the "shared structure data object" which is accessible by the multiple users is a shared book 40 (column 16, lines 25-28).

The shared book 40 is a multi-part publication which includes a number of individual entries 44 as illustrated in Fig. 2 (column 18, lines 62-67). When a user wishes to edit one of the entries 44 of the shared book 40 apparently on the file server 16, the user opens the entry 44 and must lock the entry 44 (e.g., column 12, line 47-49; column 16, lines 53-55; column 21, lines 28-31). Bly suggests obtaining a lock on the entry 44 even if the user transfers a copy of the entry 44 onto the user's individual workstation 14 since without obtaining a lock on the entry 44 at the file server 16 the user with the "local copy" risks the entry 44 on the file server 16 being subsequently locked and edited by another user (column 31, lines 59-66). Once an entry 44 is locked, this prohibits any other user from even viewing the locked entry 44 such that the "locking" user has exclusive rights to the locked entry 44 to make the desired edits (column 21, lines 28-31; column 23, line 63 through column 24, line 2). Only after the user saves the locked entry 44, with any edits made thereto, is the entry 44 again made available to other users (column 19, lines 36-39).

B. Disclosure of Kaufman

Kaufman is generally directed to a computer system which includes a host processor 10 and at least one text processing terminal 20 which are connected via a communication line 30 as illustrated in Fig. 1 (e.g., column 3, lines 6-30) and, more particularly, to a method for transmitting data between a given

text processing terminal 20 and the host processor 10 to affect editing of a particular computer file. Apparently, a portion of a given computer file is transferred to the screen of the terminal 20 (e.g., Abstract; column 3, lines 12-20). The user at the terminal 20 is able to perform certain edits on this portion of the computer file which is stored on its screen (e.g., column 3, lines 60-64). Moreover, the terminal 20 assembles a compacted audit message indicative of the edits which is sent to the host processor 10 (e.g., column 3, lines 60-64). The host processor 10 then updates the computer file by "decoding" the compacted message and performing the requested audits on the computer file (e.g., column 3, line 66 through column 4, line 2). As such, in contrast to the requirements of Claim 1, Kaufman also does not disclose or suggest a computer file editing system in which a host personal computer with multi-tasking processing capabilities both coordinates the execution of editing of a given computer file and the transfer of data, limited to the edits, to a plurality of remote computer displays such that each user at a remote display may view the editing of a given computer file on substantially a real-time basis (i.e., where each of the users sees the edits on the computer file substantially contemporaneously with the inputting thereof by a given user).

VIII. ARGUMENTS - REJECTIONS UNDER 35 U.S.C. § 103 (37 C.F.R. § 1.192 (c)(6)(iv))

A. Independent Claim 1

Claim 1 is a computer file editing system for a plurality of users at different remote locations having the following relevant subcombination of features from Claim 1 for purposes of addressing the Examiner's § 103 rejection based upon Bly and Kaufman:

1) the system includes at least one host PC having a multi-tasking processing means which is multifunctional, namely a host PC which both coordinates the execution of file editing operations inputted by at least one of the plurality of users and the transfer of data, limited to the edits, from the multi-tasking PC directly to the displays of all of the PCs within the computer file editing system; and

2) a plurality of users at remote locations are able to concurrently view the same portion of the computer file on their respective displays, including any edits made to the subject computer file by at least one of the users, and these edits are provided to all of the displays on a substantially real-time basis such that each user sees the edits substantially contemporaneously with the inputting of the same.

Bly does not disclose the above-noted subcombination of features from Claim 1. In fact, the disclosure of Bly actually teaches prohibiting this type of function as a specific

advantage of its system (e.g., column 8, lines 50-53 ("user access control also provides exclusivity or privacy to invoked changes to parts of the shared structured data object without interference from other users"); column 12, lines 47-49 ("system must prevent two different users from attempting to modify the same information at the same time")). That is, Bly teaches away from Appellant's invention of Claim 1, and thus supports Appellant's position that Claim 1 is not obvious based upon the combination proposed by the Examiner.

A user of the Bly system has a number of alternatives by which an entry 44 of a book 40 may be edited, neither of which allows multiple users to view the entry 44 while being edited and to see these edits on a substantially real-time basis (i.e., as edits are input by at least one of the users). Initially, Bly indicates that a user may retain a copy of the entry 44 from the file server 16 to work on at the user's individual workstation 14 (i.e., a local copy). If this user does not obtain a lock on the entry 44 at the file server 16 in this case, the user with a local copy of the entry 44 risks the entry 44 on the file server 16 being subsequently locked by another user which "could lead to complications when the first user copies an edited version back into the shared book" (column 31, lines 59-66). As such, Bly expressly indicates that this approach is not advisable (column 31, lines 58-60). When utilizing this approach to editing an entry 44 it is nonetheless clear that other users are unable to view the local copy of the

entry 44 being edited by one user at their own workstation 14. As such, when employing this alternative for editing an entry 44 in Bly it is clear that multiple users are not each viewing the same edits being input by at least one user on the computer file on a substantially real-time basis as required by Claim 1.

An alternative editing approach suggested by Bly for editing one of the entries 44 of the shared book 40 is to open the entry 44 apparently on the file server 16 and thereafter lock the entry 44 (e.g., column 12, line 47-49; column 16, lines 53-55; column 21, lines 28-31). If the user does not obtain a lock, the entry 44 will be uneditable by the user 44 (column 25, lines 35-39) and read-only rights will be granted. Once an entry 44 is locked, this prohibits any other user from even viewing the locked entry 44 such that the "locking" user has exclusive rights to the locked entry 44 to make the desired edits thereto (column 21, lines 28-31; column 23, line 63 through column 24, line 2). Consequently, other users are unable to see the locked entry 44 as it is being edited by the "locking" user. Only after the user saves the locked entry 44 with any edits made thereto is the entry 44 again made available to other users (column 19, lines 36-39), but still in accordance with the above. As such, when employing this alternative for editing an entry 44 in Bly it is clear that multiple users are not each viewing the same edits being input by at least one user on the computer file on a substantially real-time basis as required by Claim 1.

Notwithstanding the foregoing description in Bly, the Examiner takes the position in the Office Action dated July 6, 1994 (Paper No. 20) that Bly teaches in column 9, lines 40-41 that "a plurality of users could view and edit a particular entry of the shared structured data object." A statement within a patent may not be taken out of context, but instead must be viewed in relation to the entire disclosure. Ex parte Luck, 28 U.S.P.Q.2d (BNA) 1875, 1876 (Bd. Pat. App. & Int. 1993); see W.L. Gore & Assocs., Inc. v. Garlock, Inc., 220 U.S.P.Q. (BNA) 303, 311 (Fed. Cir. 1983) (in an obviousness evaluation based upon a reference, it is reversible error to consider a reference in less than its entirety); In re Felton, 179 U.S.P.Q. (BNA) 295, 298 (C.C.P.A. 1973) ("The disclosure as a whole cannot be considered to sufficiently direct one skilled in the art to the invention . . . .). Consequently, a review of the remainder of Bly must be undertaken to evaluate the meaning of the statement in column 9, lines 40-41 referenced by the Examiner.

As noted above, Bly is directed to an editing system for a shared book 40 comprised of a plurality of entries 44. Although Appellant agrees that a plurality of users may be editing the shared book 40 at the same time in the Bly system, only one user may edit a particular entry 44 at a time. That is, the multi-user system of Bly prevents two users from even attempting to modify the same information at the same time since only one user may access this information at any one time. Only one user in the Bly system may be editing a given entry 44 at any one time

and this user has exclusive access to the entry 44 when doing so (e.g., column 21, lines 28-31; column 23, line 63 through column 24, line 2). Consequently, the statement in column 9, lines 40-41 does not and simply cannot stand for the proposition asserted by the Examiner.

The Examiner also cites column 1, lines 34-41 of Bly for the proposition that "Bly taught a system which permitted multiple remote users to concurrently view the same computer file and review edits as they were made." Initially, Appellant respectfully notes to the Board that this portion of Bly is the "BACKGROUND OF THE INVENTION" section of the patent and is a discussion of apparently a prior art system to the Bly invention. This portion of Bly does not disclose or suggest the entirety of Appellant's invention of Claim 1 as will be discussed in more detail below. Furthermore and as noted, the entirety of a prior art reference must be consulted and reviewed to determine what the prior art reference teaches to one skilled in the art. Ex parte Luck, 28 U.S.P.Q.2d (BNA) at 1876; see also W.L. Gore & Assocs., Inc. v. Garlock, Inc., 220 U.S.P.Q. (BNA) at 311 (in an obviousness evaluation based upon a reference, it is reversible error to consider a reference in less than its entirety); In re Felton, 179 U.S.P.Q. (BNA) at 298 ("The disclosure as a whole cannot be considered to sufficiently direct one skilled in the art to the invention . . . .).

The invention of Bly is contrary to the teachings presented in column 1, lines 34-41 in that Bly expressly indicates that

multiple users of the Bly system are prohibited from concurrently viewing the same information as it is being edited by one of the users (column 21, lines 28-31; column 23, line 63 through column 24, line 2). Consequently, Appellant submits that the teachings of Bly as a whole is to allow only a single user access to a given portion of a computer file at any one time to edit the same. As such, Bly does not teach the subcombination presented with regard to Claim 1 noted above, that of allowing multiple users to view the same portion of a computer file and receive and view edits being made thereto by at least one of the users on a substantially real-time basis. The contrasting nature of the portion of column 1, lines 34-41 of Bly and that portion of Bly which is directed to its invention also serves as a basis for it being improper for the Examiner to even attempt to combine column 1, lines 34-41 of Bly with that portion of Bly directed to its invention. However, even this combination would not disclose or suggest Appellant's invention of Claim 1.

With further regard to the citation by the Examiner to column 1, lines 34-41 of Bly, Appellant readily admits that a reference is relevant for all it contains. In re Young, 18 U.S.P.Q.2d (BNA) 1089, 1091 (Fed. Cir. 1991). However, column 1, lines 34-41 of Bly only refers to a result and does not address the structure which provides this result. The subcombination of features presented above with regard to Claim 1 of Appellant's includes, inter alia, a host computer with

multi-tasking processing means for coordinating the editing operations and the transfer of data, limited to the edits, to the various remote displays such that the desired "real-time" capabilities are realized. As such, the cited portion of Bly is completely adequate on this aspect of the above-noted subcombination. Moreover, the discussion of the results achieved by a prior art system in column 1, lines 34-41 of Bly is very general at best. This discussion does not disclose or suggest that edits are provided to the displays of a plurality of remotely located personal computers on a substantially real-time basis or that it is only the edits that are being transferred for display. Appellant respectfully submits that the only reason that the Examiner is able to glean the types of aspects of the cited subcombination of Claim 1 from column 1, lines 34-41 of Bly is through impermissible hindsight. See In re Fritch, 23 U.S.P.Q 2d (BNA) at 1784 (it is impermissible to use hindsight in evaluating the obviousness of a claimed invention by using the patent applicant's specification as an instruction manual or template to reconstruct the claimed invention from the references). Therefore, the disclosure in column 1, lines 34-41 of Bly also does not disclose or suggest the noted subcombination of Claim 1.

Kaufman does not compensate for the above-described deficiencies of the disclosure of Bly with regard to the above-noted subcombination from Claim 1. That is, Kaufman does not disclose or suggest a computer file editing system in which a

host personal computer with multi-tasking processing capabilities both coordinates the execution of editing of a given computer file and the transfer of data, limited only to the edits, to a plurality of remote computer displays such that each user at a remote display may view the editing of a given computer file on substantially a real-time basis (i.e., such that each of the users sees the edits on the computer file substantially contemporaneously with the inputting thereof by a given user). In fact, Kaufman does not address the desirability for at least two remotely located users to have access to the same computer file, much less the desirability for these users to be able to simultaneously view edits being made to the file by at least one of the users as these edits are made (i.e., on substantially a real-time basis). Instead, Kaufman principally pertains only to the transfer of audit messages from a remotely located terminal 20 to a host computer 10.

Not only does the combination of Bly and Kaufman fail to disclose or suggest a computer file editing system in which a host personal computer with multi-tasking processing capabilities both coordinates the execution of editing of a given computer file and the transfer of edit data to a plurality of remote computer displays such that each user at a remote display may view the editing of a given computer file on substantially a real-time basis (i.e., such that each of the users sees the edits on the computer file substantially contemporaneously with the inputting thereof by a given user),

there is not even a motivation to combine what limited teachings there are in Bly and Kaufman. See In re Fine, 5 U.S.P.Q.2d (BNA) at 1599 (there must be some reason or suggestion, motivation, or incentive in the prior art references to combine the various teachings in a manner which defines the claimed combination to render such obvious). The principle problems addressed by Bly relate to preventing multiple users from accessing and editing the same part of a given computer file and how to provide status information regarding the editing of a given publication to users. Not only does Bly fail to expressly indicate where the data processing within its system is occurring (i.e., there is no indication that processing is occurring on the file server 16 and/or UNIX mini computer 24 versus at the individual workstations 14), but Bly does not address that the speed of data transfer is critical or even an issue regarding operation of its system (i.e., if processing occurs locally on each workstation 14, there is not even communication between the workstation 14 and the file server 16 during editing operations). Kaufman, on the other hand, has as its main objective addressing the data transfer between a terminal 20 and a host processor 10. Due to Bly's failure to provide any indication that the speed of data transfer between its workstations 14 and the file server 16 or UNIX mini computer 24 presents any issue, there would simply be no motivation to combine the teachings of Kaufman with those of Bly.

Based upon the foregoing, Claim 1 and all claims grouped therewith as presented in Article V above are allowable over the combination of Bly and Kaufman asserted by the Examiner.

B. Independent Claim 9.

Claim 9 is a computer file editing system for a plurality of users at different remote locations having the following relevant subcombination of features from Claim 9 for purposes of addressing the Examiner's § 103 rejection based upon Bly and Kaufman:

1) the system includes at least one host PC having a multi-tasking processing means which is multifunctional, namely a PC which coordinates the execution of file editing operations inputted by at least one of the plurality of users and the transfer of data, limited to the edits, from the multi-tasking PC directly to the displays of all of the PCs within the computer file editing system;

2) a plurality of users at remote locations are able to concurrently view the same portion of the computer file on their respective displays, including any edits made to the subject computer file by at least one of the users, and these edits are provided to all of the displays on a substantially real-time basis such that each user sees the edits substantially contemporaneously with the inputting of the same, all due to multi-tasking capabilities of the host PC; and

3) each user is able to input edits at the use's personal computer and the input devices and displays of the various personal computer directly interface with the multi-tasking processing means of the host computer.

Initially, Claim 9 is allowable for the reasons presented above with regard to Claim 1. However, Claim 9 is further allowable since it adds to the subcombination of features presented above with regard to Claim 1 a further feature that each personal computer also has an input device which directly interfaces with the multi-tasking processor of the host computer. As such, each user not only sees the edits on their respective display on a real-time basis, but each user may also input edits to the computer file during a given editing operation. This subcombination from the computer file editing system of Claim 9 would be particularly desirable in instances where the multiplicity of remotely located users could not provide voice input to a user designated for inputting the edits. That is, the noted subcombination of features from Claim 9 would allow for the desired type of editing of a given computer file without requiring that each of the users also be in voice communication during the editing operation.

The disclosures of Bly and Kaufman, singularly or combinatively, fail to disclose or suggest the noted combination of features from Claim 9. That is and in contrast to Claim 9, not only do Bly and Kaufman fail disclose or suggest that a plurality of users may each view the same edits being made to a

given computer file on their respective display on a real-time basis, but they also fail to disclose or suggest that each user may enter edits on the input device associated with their respective personal computers as a result of a direct interconnection with the host computer's multi-tasking processor. Neither Bly nor Kaufman even reference any problem associated with having at least one of the users in a collaborative editing process be out of voice communication with other users, much less the solution of how to solve this type of problem. In the case of Claim 9, the problem was solved by providing each user with the ability to input edits by having each user's input device on their personal computer interact directly with the multi-tasking processor of the host computer. This of course also facilitates the real-time viewing of the same edits being made to the same file by the plurality of users at the remote locations.

Based upon the foregoing, Claim 9 and all other claims grouped therewith as noted in Article V above have this further basis for allowability over the combination of Bly and Kaufman asserted by the Examiner in addition to that presented with regard to Claim 1.

C. Independent Claim 23.

Claim 23 is a computer file editing system for a plurality of users at different remote locations having the following relevant combination of features for purposes of addressing the Examiner's § 103 rejection based upon Bly and Kaufman:

1) the system includes a PC having a multi-tasking processing means which is multifunctional, namely a PC which both coordinates the execution of file editing operations inputted by at least one of the plurality of users and the transfer of data, limited to the edits, from the multi-tasking PC directly to the displays of all user terminals within the computer file editing system;

2) a plurality of users at remote locations are able to concurrently view the same portion of the computer file on their respective displays, including any edits made to the subject computer file by at least one of the users, and these edits are provided to all of the displays on a substantially real-time basis such that each user sees the edits substantially contemporaneously with the inputting of the same; and

3) all users are in voice communication via a voice communication means.

Initially, Claim 23 is allowable for the reasons presented above with regard to Claim 1. However, Claim 23 is further allowable since it further provides that all users are in voice communication during a given editing operation. As such, the

users may openly discuss desired edits and a single user may control the inputting of the same.

The disclosures of Bly and Kaufman, singularly or combinatively, fail to disclose or suggest the noted combination of features from Claim 23. That is and in contrast to Claim 23, not only do Bly and Kaufman fail disclose or suggest that a plurality of users may each view the same edits being made to a given computer file on their respective display on a real-time basis, but they also fail to disclose or suggest that each of these users may also be in direct voice communication with each other throughout the collaborative editing process. Neither Bly nor Kaufman reference any problem associated with not having a plurality of users being able to communicate via multiple media, much less the solution to this problem selected by Appellant. That is, Appellant's solution was to allow the plurality of users to "communicate" by not only seeing the same edits as they are made to a given computer file on a substantially real-time basis, but to allow provide for voice communication between the plurality of users.

Based upon the foregoing, Claim 23 and all other claims grouped therewith as noted in Article V above have this further basis for allowability over the combination of Bly and Kaufman asserted by the Examiner in addition to that presented with regard to Claim 1.

D. Dependent Claim 11.

Claim 11 depends from Claim 9 and is therefore allowable for the above-noted reasons. However, Claim 11 includes an additional feature which, when combined with those of Claim 9, provide an additional basis for allowability over the combination of Bly and Kaufman asserted by the Examiner. Specifically, Claim 11 further requires that the users be in voice communication (e.g., via telephone handsets 16,18,20: page 15, lines 9-14). As noted above with regard to Claim 23, Bly and/or Kaufman do not disclose this additional "feature".

Based upon the foregoing, Claim 9 and all other claims grouped therewith as noted in Article V above are allowable for both the reasons presented above regarding Claims 9 and 23.

VII. CONCLUSION

Based upon the foregoing, Appellant respectfully requests the Board to reverse the Examiner's § 103 rejection of all pending claims and to pass the above-identified patent application to issuance.

Respectfully submitted,

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APPENDIX A

APPEALED CLAIMS

PENDING CLAIMS

1. A computer file editing system for a plurality of users at different remote locations, comprising:

a plurality of personal computers, one for each of the users, each of said plurality of personal computers including computer file display means, at least one of said personal computers being designated host computer for given file editing operations and having multi-tasking processing means for coordinating the execution of said file editing operations comprising edits of less than the entirety of a given computer file inputted by at least the user of one of said personal computers, and for coordinating the transfer of data corresponding with and limited to said file editing operations from said host computer to the display means of the others of said plurality of personal computers whereby said file editing operations and said corresponding limited data transfer are performed in a predetermined manner by said host computer; and

interconnecting means for electrically interconnecting said host computer with the others of said plurality of personal computers to permit transmission of electrical signals corresponding with said file editing operations therebetween;

wherein said plurality of users are permitted to concurrently view said given computer file and, subject to practical system limitations, said computer file display means, multi-tasking processing means and interconnecting means operate so that said file editing operations and said corresponding limited data transfer to said display means occur on a substantially real-time

basis relative to said edit inputs to permit said plurality of users at said different remote locations to review with their respective display means said edits made to said given computer file substantially contemporaneously with the corresponding input of said edits and execution of said file editing operations.

2. A computer file editing system according to Claim 1, further comprising:

at least two voice communication means for transmitting audio signals between at least two of said users, said audio signals being representative of the corresponding user's voice.

3. A computer file editing system according to Claim 1, wherein said interconnecting means is a non-dedicated digital communications system for transferring said data digitally between said host computer and said remaining ones of said plurality of personal computers.

4. A computer file editing system according to Claim 2, wherein said interconnecting means is a non-dedicated digital network which comprises said voice communication means and means for contemporaneously transferring said data between said host computer and said remaining ones of said plurality of personal computers and transmitting said audio signals among the users.

5. A computer file editing system according to Claim 1, wherein said interconnecting means comprises a plurality of modems, each having digital-to-analog conversion means and analog-to-digital conversion means and each electrically interconnected between one of said personal computers and an analog communications

network, said analog communications network operable for transferring said data between at least two of said personal computers; and

wherein each of said personal computers includes data compression/decompression means for compressing said data to be transferred before said data is sent over the analog communications network and for decompressing said data when received from the analog communications network.

6. A computer file editing system according to Claim 1, wherein said interconnecting means is an integrated services digital network.

7. A computer file editing system according to Claim 1, wherein said interconnecting means comprises a plurality of modems, each having digital-to-analog conversion means and analog-to-digital conversion means and each electrically interconnected between one of said personal computers and an analog communications network, said analog communications network operable for transferring said data between at least two of said personal computers; and

wherein each of said modems includes data compression/ decompression means for compressing said data to be transferred before said data is sent over the analog communications network and for decompressing said data when received from the analog communications network.

8. A computer file editing system according to Claim 1, further comprising:

a plurality of modems, each having digital-to-analog conversion means and analog-to-digital conversion means and each electrically interconnected between one of said personal computers and an analog communications network, said analog communications network operable for transferring said data between at least two of said personal computers; and

data compression/decompression means for compressing said data to be transferred before said data is sent over the analog communications network and for decompressing the data when received from the analog communications network.

9. A system for contemporaneously editing a given computer file by any of a plurality of users, comprising:

a plurality of personal computers, one for each of the users, each of said personal computers including means for inputting edits to said given computer file and means for displaying said given computer file, at least one of said personal computers being designated host computer for given file editing operations and having multi-tasking processing means interconnected with the input means and display means of said plurality of personal computers for coordinating the execution of said file editing operations comprising edits of less than the entirety of said given computer file from the inputting means of any of said personal computers and the transfer of data corresponding with and limited to said file editing operations from said at least one of said personal computers to said display means of the others of said plurality of personal computers; and

interconnecting means comprising a non-dedicated digital communications system for transferring said data digitally between said host computer and said others of said plurality of personal computers;

wherein said plurality of users are permitted to concurrently view said given computer file and, subject to practical system limitations, said inputting means, display means, multi-tasking processing means and interconnecting means operate so that said file editing operations and said corresponding limited data transfer occur on a substantially real-time basis relative to said

edit inputs to permit said plurality of users at their respective remote locations to review with their respective display means said given computer file reflecting said edits made thereto substantially contemporaneously with the corresponding input of said edits and file editing operations.

10. A system for contemporaneously editing a file according to Claim 9, wherein the multi-tasking processing means comprises means for sequentially polling the input from each of the inputting means, means for executing any editing operation input by one of said users on a file, and means for sending said data from said host computer to all of the display means as the editing operation is input by said one of said users.

11. A system for contemporaneously editing a file according to Claim 9, further comprising:

a plurality of voice communication means, in one to one correspondence with said plurality of personal computers, for transmitting audio signals representative of any user's voice to each other user.

12. Cancelled.

13. A system for contemporaneously editing a file according to Claim 11, wherein said interconnecting means is a non-dedicated digital network which comprises said voice communication means and means for contemporaneously transferring said data between said host computer and said remaining ones of said plurality of personal computers and transmitting said audio signals among the users.

14. A system for contemporaneously editing a file according to Claim 10, wherein:

said interconnecting means comprises:

a plurality of converting means, each electrically interconnected with one of said personal computers, for converting digital signals from each of said personal computers to analog signals and converting analog signals to digital signals, and

an analog communications network for electrically interconnecting the plurality of converting means and transferring said analog signals to and from the converting means, wherein

each of said personal computers further includes data compression/decompression means for compressing data to be transferred before said data is sent over the analog communications network and for decompressing said data when received from the analog communications network.

15. A system for contemporaneously editing a file according to Claim 10, wherein:

a first plurality of said personal computers are electrically interconnected in a first local area network and at least a second plurality of said personal computers are interconnected in at least a second local area network; and

said interconnecting means includes means for interconnecting said first local area network with said at least second local area network for allowing transfer of said data to and from the personal computers in said first and said at least second local area networks.

16. Cancelled.

17. A system for contemporaneously editing a file according to Claim 10, wherein the coordinating means includes means for excluding input from at least one selected inputting means from the sequential polling.

18. Cancelled.

19. Cancelled.

20. Cancelled.

21. Cancelled.

22. Cancelled.

23. An interactive editing system for a plurality of users at different remote locations for permitting any of the users to orally provide file editing instructions comprising edits to less than an entire given computer file, and for permitting substantially contemporaneous viewing of the editing, relative to the edit inputs, by all of the users, comprising:

voice communication means, in one-to-one correspondence with the users, for transmitting audio signals representative of any user's voice and said orally provided file editing instructions to each of the others of said plurality of users;

a personal computer, having multi-tasking processing means and a display, for use by one of the users to input and execute the editing instructions orally provided by the others of said plurality of users;

a plurality of remote terminals, one for use by each of the remaining ones of said plurality of users and each having a display; and

interconnecting means for electrically interconnecting said personal computer with each of said remote terminals and for transferring data corresponding with the file editing instructions, comprising edits to less than an entire given computer file,

between said personal computer and said displays of said remote terminals;

wherein said plurality of users are permitted to concurrently view said given computer file and, subject to practical system limitations, said file editing instruction execution and said corresponding data transfer to said displays occur on a substantially real-time basis relative to said edit inputs to permit said plurality of users at said different remote locations to view with their respective displays edits made to a given computer file substantially contemporaneously with said edit inputs and the execution of said file editing instructions.

24. Cancelled.

25. An interactive editing system according to Claim 23, wherein said interconnecting means is a non-dedicated digital communications system for transferring said data digitally between said personal computer and said remote terminals.

26. An interactive editing system according to Claim 23, wherein:

said interconnecting means comprises a plurality of modems, one of said modems having digital-to-analog conversion means and analog-to-digital conversion means, said one of said modems electrically interconnected between said personal computer and an analog communications network and each of the remaining one of said plurality of modems containing analog-to-digital conversion means and electrically interconnected between a corresponding one of said remote terminals and said analog communications network, said

analog communications network operable for transferring said data between said personal computer and said remote terminals, and

said one of said modems includes data compression/ decompression means for compressing said data to be transferred between said personal computer and said remote terminals before said data is sent over the analog communications network and for decompressing said data when received from the analog communications network and each of said remaining ones of said plurality of modems includes data decompression means for decompressing said data when received from the analog communications network.

27. A computer file editing system according to Claim 1, further comprising:

a plurality of voice communication means in one-to-one correspondence with said plurality of personal computers, for transmitting audio signals representative of any user's voice to each other user.

28. A computer file editing system for a plurality of users at different remote locations, comprising:

a plurality of personal computers, one for each of the users, each of said plurality of personal computers including display means, at least one of said personal computers being designated host computer for given file editing operations and having multi-tasking processing means for coordinating the execution of said file editing operations comprising edits of less than the entirety of a given computer file inputted by at least the user of one of said personal computers, and for coordinating the transfer of data corresponding with and limited to said file editing operations from said host computer to the display means of the others of said plurality of personal computers whereby said file editing operations and said corresponding limited data transfer are performed in a predetermined manner by said host computer; and

interconnecting means for electrically interconnecting said host computer with the others of said plurality of personal computers to permit transmission of electrical signals corresponding with said file editing operations therebetween;

a plurality of voice communication means, in one-to-one correspondence with said plurality of personal computers, for transmitting audio signals representative of any user's voice to each other user;

wherein said plurality of users are permitted to discuss and concurrently view said given computer file and, subject to practical system limitations, said display means, multi-tasking

processing means and interconnecting means operate so that said file editing operations and said corresponding limited data transfer to said display means occur on a substantially real-time basis relative to said edit inputs to permit said plurality of users at said different remote locations to review with their respective display means said edits made to said given computer file substantially contemporaneously with the corresponding input of said edits and execution of said file editing operations.

APPENDIX B

U.S. PATENT NO. 5,008,853 TO BLY AND
U.S. PATENT NO. 5,173,854 TO KAUFMAN

APPENDIX C

CITED CASES